

## **F.6. LOCAL YEASTS ISOLATED FROM CIMIȘLIA WINE CENTER AS A WINEMAKING PERSPECTIVE OF THE REPUBLIC OF MOLDOVA**

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**Abstract.** The yeasts responsible for alcoholic fermentation in winemaking usually get in the must from the surface of the grapes, the equipment used or by direct administration of specific yeasts. Currently active dry yeasts (ADY) are widespread in many countries, by using of which excellent results are obtained. Recently, there has been an increased interest regarding the use of local yeast isolated from the fermented must, which possess certain specific metabolic characteristics that ensure the authenticity and specificity of the wine (distinctive organoleptic characteristic). The purpose of this paper relies on the quantification and selection of indigenous flora from the Ștefan Vodă wine-growing region in order to produce experimental dry white and red wines. For scientific purposes, the study was carried out on the berries and grape must microflora of white varieties (Fetească Regală, Muscat and Traminer) and red varieties (Pinot Noir and Cabernet-Sauvignon). As a result, pure cultures of local/indigenous yeast strains were isolated and selected from the “Cimișlia” wine region. The microscopic study allowed the selection of 24 pure cultures of the genus *Saccharomyces* for further technological studies. Microscopy of the samples revealed yeasts of the eukaryotic type in which the cellular components are well distinguished, they have different shapes and sizes, etc. The use of these pure species in the production of experimental white and red wines allowed to obtain experimental qualitative and highly organoleptically valued wines, furthermore, the dynamics of the must fermentation process is similar to that achieved by industrial active dry yeasts. The isolated local yeasts were appreciated as a valuable biological material, recommended from a winemaking perspective, they contribute to obtaining quality wines that respect the personality and aromatic potential of the grape varieties.

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